

Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

1 (Canceled)

2 (Canceled)

3 (Original): A semiconductor device, comprising:

a first copper layer;

an insulating layer formed on said first copper layer and having a via reaching said first copper layer; and

a second copper layer electrically connected to said first copper layer through said via, at least either one of said first and second copper layers containing an inert element.

4 (Original): The semiconductor device according to claim 3, wherein said inert element is argon.

5 (Currently Amended): A semiconductor device, comprising:

a first copper layer;

an insulating layer formed on said first copper layer and having a via reaching said first copper layer; and

a second copper layer electrically connected to said first copper layer through said via, at least either one of said first and second copper layers containing an element ~~in group 8 of a periodic table~~ selected from the group consisting of iron, cobalt, nickel, ruthenium, rhodium, palladium, osmium, iridium, and platinum.

6 (New): The semiconductor device according to claim 3, further comprising a barrier layer located between said second copper layer and said insulating layer, and between said first copper layer and said second copper layer, said barrier layer having a structure with a tantalum nitride layer sandwiched by layers having a better adhesive property to copper than said tantalum nitride layer.

7 (New): The semiconductor device according to claim 6, wherein said barrier layer has a multi-layer structure with said tantalum nitride layer sandwiched by layers selected from the group consisting of tantalum, titanium nitride, titanium silicide, and tungsten nitride.

8 (New): The semiconductor device according to claim 5, wherein the concentration of said element is $\leq 5\%$ by mass based on the total mass of said copper layer.

9 (New): The semiconductor device according to claim 8, wherein the concentration of said element is about 0.5% by mass based on the total mass of said copper layer.

10 (New): The semiconductor device according to claim 5, further comprising a barrier layer located between said second copper layer and said insulating layer, and between said first copper layer and said second copper layer, said barrier layer having a structure with a tantalum nitride layer sandwiched by layers having a better adhesive property to copper than said tantalum nitride layer.

11 (New): The semiconductor device according to claim 10, wherein said barrier layer has a multi-layer structure with said tantalum nitride layer sandwiched by layers selected from the group consisting of tantalum, titanium nitride, titanium silicide, and tungsten nitride.